

Notice of Allowability

Application No.

09/939,954

Examiner

James S. Wozniak

Applicant(s)

WHITMAN ET AL.

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 4/16/2007.
2. ☒ The allowed claim(s) is/are 49-50, 52-56, 58-62, and 64-66 (now claims 1-15).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Response to Amendment

1. In response to the office action from 12/11/2006, the applicants have submitted an amendment, filed 4/16/2007, amending Claim 49, while arguing to traverse the previous 35 U.S.C. 101 rejection (*Amendment, Pages 9-10*). Due to the amendments, method claim 49 now recites an active step of generating an audio classification, which is a “useful, tangible, and concrete result.” Thus, in light of the amendments and the applicants’ arguments, claims 49-50 and 52-54 are allowable over the prior art of record for the below given reasons. Also, claims 55-56, 58-62, and 64-66 were indicated as being allowable over the prior art of record in the previous Office Action (*Pages 4-5*). The reasons for allowance with respect to these claims are repeated below.

Election/Restrictions

2. This application is in condition for allowance except for the presence of claims 19-26 and 44-48 directed to an invention non-elected without traverse (*see response from 9/29/2004*). Accordingly, claims 19-26 and 44-48 been cancelled.

Allowable Subject Matter

3. **Claims 49-50, 52-56, 58-62, and 64-66** are allowable over the prior art of record.

4. The following is an examiner's statement of reasons for allowance:

With respect to **Claims 49, 55 and 61**, the prior art of record fails to explicitly teach or fairly suggest a method, program stored on a computer readable medium causing a computer to execute a process, or system containing module components (*specification, Paragraphs [0049-0051]*) for music classification implemented using a multiple stage classifier comprising a first stage of support vector machine (SVM) classifiers each associated with a musical category such as a particular artist or genre, wherein input audio signal learning vectors are applied to each SVM classifier to produce a value indicative of how well or poorly the input audio signal vector conforms to a particular classification, and wherein the generated value from each of the classifiers is utilized in creating a metalearning vector, which is utilized at a neural network classifying stage to make a final classification determination.

Although Weare et al (*US 6,657,117*) mention determining a degree of similarity (distance) to a particular audio classification, such a similarity determination is made at a second classification stage and not at a first classification stage utilizing a SVM (*Col. 10, Line 65- Col. 11, Line 50*). Therefore, since the distance value determination taught by Weare does not occur in a first classification stage, Weare also fails to disclose the use of such values in creating a metalearning vector to be used in a final neural network classification stage.

Thus, Claims 49, 55 and 61 are allowable over the prior art of record.

Dependent claims 50, 52-54, 56, 58-60, 62, and 64-66 further limit allowable independent claims, and thus, are also allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached at (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James S. Wozniak
6/25/2007


PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER